# CATS
## CAPITOL AREA TIMEX/SINCLAIR USERS GROUP

# NEWSLETTER

$1.00 per copy
Please support your computer-
JOIN CATS!

Vol. 4, No. 11
February 1987


## * * * CONTENTS * * *


From the President.....1
January Meeting.....2
From the Editor.....4
Treasurer's Bill.....5
Notes from the Library....6
Letters Page.....7
VU-CALC Check Register....8
1000/2068 Circle Games....9
QL Backup Utility.....10


PRESIDENTIAL RAMBLINGS

First and foremost, Mark Steuber of Sharp's, will be our guest speaker and demonstrator at the February meeting. Mark has written software for the 2068, Spectrum and QL. He will demonstrate "War in the East" for us. (It is available for the 2068 and QL.)

Among other things, Sharp's is a major importer of Spectrum and QL peripherals and software. I have asked him to come prepared to demonstrate and take orders for what you need or desire. Turn out and show your support for your computers!!

Many of you who attended the January meeting may have noticed that the meeting was decidedly slanted towards the QL. I must state that we have no intention of deserting the 1000 or 2068. However, the QL is novel, and over half of those attending the meeting had purchased a QL within the prior month. There have been a few new developments for the 2068, and we continue to entertain any questions or concerns for these machines.

All is well with the 12 to 2 session before the general meeting. I have a few new slick tricks up my sleeve for the QL. Come and find out about them! The order has been placed for twenty QL ROM boards and we have received confirmation from Care Electronics, in England. I expect to have the boards before the next meeting. Fourteen of the boards have been reserved at this time. If you want to pick up your board, come EARLY!!

There are still about ten SCLD chips left. Although the rush has tapered off, if you do not already have a backup chip, I suggest that you not put it off any longer. They won't last forever!! Orders should be placed with Ruth Fegley to avoid unnecessary delays.

The New Carrollton Library has reprimanded us because of litter left around the meeting room. If such litter is left around in the future, we will lose our visitation rights. Since we are all responsible, we should each make it a habit to take out everything that belongs to us. This will be one of our topics for discussion.

Finally, a short reminder of the TS Computerfest coming to the Holiday Inn North, in Indianapolis, Indiana. Remember to reserve some time and space for it. It's the first weekend in May.

TB

# QL (Quantum Leap) Computers Put Together, Dissected at CATS Meeting

Bearing down on an SCLD socket soldering job are (clockwise, from top right): Phil Russo, Verne Smith and Mark Fisher.

ASSEMBLERS: Tom Bent, rear, & (clockwise) Manny Quintero, Gail Osborne, Ruth Fegley & Stan Guttenberg finish up Ruth's QL kit.

In January, CATS produced a generous aggregation of small computer enthusiasts eager to learn everything available about Sinclair computers in general---and the rapidly-blooming QL (Quantum Leap) in particular.

The attendees were clever enough to gather two weeks ahead of the Metro-paralyzing Great Snows of '87.

This provided them much occupational therapy to engage in while the rest of the populace succumbed to cabin fever.

## Hardware Meeting

Around noon members started trooping into the New Carrollton library toting large white boxes---their QL kits.

Soon the "hardware room" was filled with electronic hobbiests bringing their machines up to speed. Under the guidance of Tom Bent, CATS president and editor of the new "Quantum Levels" magazine, the owners assembled their cases (simple) and did two upgrades recommended by Tom (harder):

(1) inserting a capacitor at the input to the voltage regulator (no soldering); and
(2) setting up parallel power supplies (lots of soldering).

CATS member Mike Warmick videotaped Mark Fisher soldering an SCLD socket to a 2068 board. Next up will be a short video lesson on assembling the QL kit.

## General Meeting

The prevailing spirit of "kids loose in a toystore" carried over into the rest of the afternoon.

Tom Bent spoke continuously for three hours about the QL's software and hardware, hardly even pausing for breath.

Questions from the audience were incisive and illuminating.

The subjects Tom touched upon included:

- Memory Map of the QL
- The QL's 170 commands
- Protecting Microdrives
- Running the CONFIGURATION program
- Running the INSTALL program
- Parameters for printers
- Using the TOOLKIT II package
- Multitasking
- Using the INKWELL package
- Writing PASCAL programs
- Going 2068-to-QL and back again
- Using two-pass compilers

An informal survey at the general meeting showed 45% of the attendees either had QL's in their possession, or have one on the way.

"A good look at the way things are going to be" was the overriding consensus of the day's happenings.

--CHD

## 2nd Annual Midwest T/S Computerfest

Number two will be bigger than number one! On May 2-3, the fest will be held at the Holiday Inn North, Indianapolis IN. Rooms will be $52.00 flat rate (in advance). Call 1-800-Holiday.

Display space will be twice as big as last year, along with a flea market, two sets of lectures and a pre-Fest social dinner Friday night. Admission will be $4.00 individ., $7.00 family before 3-1-87; $6.00 & $9.00 after. For more information, contact:

Executive Director - Paul Holmgren
(checks to -) Midwest TS Computer Fest
5231 Wilton Wood Ct.
Indianapolis, IN 46254
- or download TSFEST.TXT from CompuServe.

Perhaps some day it will be as long lasting as the.....

## 12th Annual Trenton Computer Festival

On April 11-12, the TCF will again be held at Trenton State College. There will be 156 vendor booths, as well as users groups and a flea market. General Admission will be $7.00 for two days, $5.00 for Sunday only. For information call (609) 771-2487

**It's February 14th. Do you know where your T/S 1000 is tonight?**

## Contributors

Tom Bent
Hank Dickson
Ruth Fegley
Pete Fischer
Mark Fisher
Bob Howard
Akin. Olowofoyeku
Mel Richardson
John Riley

I ♥ CATS


ELECTRONICS PLUS

Your complete supplier for

NTE parts

THE NEW INDUSTRY STANDARD

QUALITY NTE PARTS:

- Transistors
- Thyristors
- Integrated Circuits
- Rectifiers and Diodes
- High Voltage Multipliers and Dividers
- Optoelectronic Devices
- Zeners
- Microprocessors and Support Chips
- Thermal Cut-Offs
- Bridge Rectifiers
- Unijunctions
- RF Transistors
- Microwave Oven Rectifiers
- Selenium Rectifiers
- Flameproof Resistors
- Wire Ties
- Electrolytic Capacitors
- Static Control Products
- Memory ICs

WE ALSO CARRY A COMPLETE LINE OF:

- cable: plenum-teflon, coaxial & data
- connectors
- shrink tubing
- cable markers
- soldering irons & tips
- solder & flux
- tools
- wire wrap tools
- tool cases
- bench vises
- panel meters
- lamps & LEDs
- proto boards
- equipment racks
- transformers
- capacitors & resistors
- speakers
- surge protectors
- PC boards
- telephone products
- tubes
- industrial paint
- chemicals & sprays

FIRST TIME EVERY TIME TOLL FREE CALL

800-843-9009

FAX: (301) 982-0022
(301) 441-9009

ELECTRONICS PLUS

9600 Baltimore Blvd.
College Park, MD 20740

## From the Editor

This is not being written on a QL. Not because of any problems with my new computer - quite the contrary (I'll get to that). But I want to emphasize that we will be bending over backwards to maintain support for the 1000 and 2068. The next editor uses a 2068 & disk drive, and this editor is about to try to get his disk i/f going. 1000's are still the beautifully designed units they always were, uniquely (thanks to people like Dave P. Woods) accessible to the hardware hacker.

So where are the articles? Well, I hold up my end of the production, and I intend to continue to contribute - after all, I enjoy telling about the stuff I'm doing. I'm not under any illusion that I am remarkably better informed than others in the club.... so where are you?

As I am writing this, I got a call from Barry Washington, re. an article on the '87 income tax form. I'm hoping it will make this issue.

I want to continue to support the full line of Sinclair products, but that depends upon recieving articles. Take the time to write us - let us know what you've discovered!

AERCO "Kits"

Phil Russo, Akin, and I spent the two hours of the hardware session butting our heads against the AERCO disk i/f. There's nothing to complain about, really. It was advertised as a bare board with NO assembly instructions; but I (and Phil and Akin) weren't prepared for the complexity of the i/f board. That, coupled with the fact that AERCO used components with nonstandard markings, left us with a discouraging pile of small electronic thingies. All the sockets are installed - now, all that is left is to find out where the thirty or so ant-sized pull up resistors go. Fortunately, I've just recieved the parts sheet that some other users group developed, and I have high hopes - still.

Phil pulled out of the deal, passing his kit to Mike Warmick - perhaps we'll end up with a video to pass on to other clubs!

QL Kits

And now for something completely different. Almost all the CATS members that ordered QL's recieved them in the week before the meeting, and a number of machines were assembled right at the hardware session. I don't know much about that as I was busy elsewhere (see above).

I assembled my machine before the meeting, and had the fun of getting told that that little tail after "mdvi_" was a critical part of the command syntax, not just the publisher's way of saying "push the ENTER key now stupid!" Honest Tom, I would have figured it out in a week or so.

But the assembly was a BREEZE - repeat BREEZE. And the few mechanical problems that have shown up in the twenty or so kits have been PROMPTLY taken care of by A+. Now, If only it wasn't an orphan...

Functionally, I had been skeptical of the glowing reviews I'd seen - but so far it's lived up to them. The "SUPERbasic" has a few quirks in the editor, but I understand that the Toolkit ROM takes care of them. ARCHIVE is the only program that I've spent any time with so far, and I'm really pleased with its D Base II-like abilities. The program editor within ARCHIVE is as smooth as I can imagine a line editor getting - a real pleasure!

The only negative I can think of is the keyboard - while better that the 2068, it can't match the WANG w/p keyboard I've spliced onto my 2068. With disks, and Jerry's CPM (D Base II in the flesh?) I expect to get many more years of service from the rig. If my father-in-law can talk to a space shuttle on a Gonsett Communicator, I should be able to keep a 2068 going!

**Schedule ---**

**Saturday, February 14, 1987**

Noon: Hardware Meeting

2 p.m.: General Meeting

Business:

- Treasurer's report
- Other reports
- Old business
- New business

First speaker:
Mark L. Steuber
President, Sharp's, Inc.

Break

Second speaker:
David M. Rothman
SYSOP for the Sinclair BBS on CompuServe

**It's February 14th. Have you hugged your 2068 lately?**

$$$$$$$$$$$$$$$$$$ TREASURY TIDBITS FROM RUTH FEGLEY $$$$$$$$$$$$$$$$$$

To better understand our financial situation and how the bookkeeping system is kept you need to know:

-- Receipts are dated the day I receive your money. (We are working on ways to shorten the time between pick up from the P.O. box and delivery to me.)

-- Dues were raised from $16 to $18 at our December 13th meeting. I used the date of your check, not the date of the receipt to determine if a balance is due. (If you used a form from an old Newsletter I noted the difference between the amount you paid and the fee for membership that was in effect at the time you paid.) Some of you have mailed the balance due. Your cooperation is greatly appreciated.

-- Since the financial records were turned over to me the end of September 42 of you have renewed and we have welcomed 14 new members to our ranks. One of the latter is the result of his being so favorably impressed with the November Newsletter that accompanied his SCLD chip purchase. (Mark certainly gets the credit for this!) These figures reflect our status following the last batch of P.O. box mail I received at the January meeting plus one check mailed directly me.

-- Our unofficial goal is 150 members during the fiscal year July 1 through June 30th. We're slightly over one third of the way in four months' time. Does that mean we have hope of reaching our goal?

-- My unpredictable disk drives plus my lack of skill in utilizing the capabilities of my Star Gemini 10X have resulted in Mark continuing to maintain the official membership list. I feed him data changes and he updates the program which produces the mailing labels. John Riley will assume that responsibility in another month, so please see that one of us is notified of needed corrections by/or during the February meeting. We'd like to have a current Membership Directory for the March meeting, so get your dues paid and correct address/telephone data to us pronto!

-- As of this writing (January 18th) 86 of the 102 SCLD chips have beens sold; 4 were complimentary; 2 are "promised"; and 5 are awaiting a check from California to consummate a telephone order of 3 weeks ago. If you want one, get your check to me asap. (You might be wise to call first...301/542-2549.)

-- Expenses for the SCLD venture have been $1410.39 and we've collected $1592.70 for a profit to date of $182.31. Sale of the remaining dozen could net another $200 or so, depending on whether they sell for $18 or $20 and the postage involved.

-- Our check book balance is now slightly over $1900. All loans and bills have been paid!

## 2068 LIBRARY ERRATTA

Well, I guess it was bound to happen. Four programs have been discovered in the current version of the CATS 2068 software library that have bugs which prevent them from loading. Fortunately, they are all the same sort of bug and easily dealt with!

In creating the master tapes for the library, I first put all the programs on an AERCO disk system. Therin lies the problem in all four programs, for the disk system uses the commands "CAT" and "MOVE" rather than "SAVE" and "LOAD". All four of the buggy programs are in Volume 3. I guess I was having a bad day that day! They are "Bold", "Extended Basic", "Keyword", and "Toolkit". What is extra mortifying to me is that the last three programs are some of the best programs in the entire library!

Anyway, to fix them, you must do the following: 1) Load the BASIC portion of the program only into your computer, using the command MERGE "". LIST the program and go to the bad line. In "Bold" this will be line 30, in "Extended Basic" line 3, in "Keyword" line 9950, and in "Toolkit" line 9998. Edit the line, replacing the CAT statement with LOAD "" CODE. SAVE the altered program on a fresh tape.

Now, you have two options from this point. You can reset your computer, move your library tape back to the beginning of the buggy program, reload your corrected listing, and overwrite the old with the new. I have done this on the library master tapes so that future copies will be bug-free. But USE CAUTION! Be careful not to overwrite either the preceeding program or the code portion of the program you are trying to fix! If you do you will have a bigger mess than you started with!

A second alternative, which I highly recommend, is to load the program "Header" (also from volume 3). Use this utility to read the starting address and length of the block of code that forms the second part of the program you are fixing. Now, reset the computer, rewind the tape, and load the code portion only of your program into the computer with the command LOAD "" CODE. When the computer returns an OK report, save the code onto your fresh tape that already contains the corrected BASIC program, with the command SAVE "c" (starting address),(data length). What you will now end up with is a copy of the program on its own tape, so that you will no longer have to hunt through the library every time that you want to use it! In fact, I would suggest to all owners of the CATS library that if you find themselves using a particular program frequently, you should copy it over to a fresh tape where it will be more easily accessible. Think of your library tape as archival, rather than for daily use.

If some of the last paragraph was confusing to you, then take comfort in the fact that I am going to submit a tutorial for next month's newsletter on transfering programs from tape to tape or from tape to disk. Meanwhile, I am still collecting programs for Volume 6 of the 2068 library, and hope to be releasing it within the next couple of months.

If you have a program to submit to the library, or a question or comment about programs in it, contact me by letter (1316 Farrara Dr., Odenton, Md. 21113), phone (301-674-8560), or CompuServe (ID #73317,3526).

John Riley

# REPLY TO REVIEW OF THE GUIDE TO T/S TELECOMMUNICATIONS

THANK YOU MR. FISHER!

YOU HAVE NO IDEA what it feels like to be compared with Jack Dohaney and Barry Carter! I'm especially glad that you appreciated the "clear organization, a table of contents and index" aspect of it. I put a lot of thought and effort in making this as accessible as possible. The index I put in is fairly limited, however. I'll be doing a better job on version 2.0.

I completely understand that you had difficulty reading the xerox-reduced pages. I knew it would be a problem for some. But when I sat down to draw up the criteria long ago, I wanted to get the maximum information to the maximum number of people without going into bankruptcy. I've already got a huge SPRINT bill - so I am off-line for a while until I catch up on that.

The only problem I have with your review is that it's TOO glowing. I think some people may be disappointed after reading your review. As it stands, the guide has about 300K of text. It took me about 60 hours just to type the finished product, never mind getting the information and composing it.

But all in all, your review was a tremendous boost to my ego. Out of all the copies I mailed I've gotten back VERY LITTLE RESPONSE in terms of the number of letters. Tim Woods of Time Designs wrote me a very congratulatory letter and I spoke with Mark Fendrick on the phone. He was also very impressed and planned a review in Feb. Computer Shopper. Unfortunately, I failed to include either Steve's or my address in the body of the Guide itself! I think that may be part of the problem.

I'm so glad you sent me a copy of your newletter because it contained the exciting news that 25 QL's were added to the Club. Amazing! I'd been hearing on and off about this deal Doug Dewey cooked up with you all and the L.I.S.T. group, but I had no idea you had that many members! I'm very happy to see such enthusiastic interest in the QL. Once people get a chance to SEE the thing and see what it does, it makes a big difference.

I'm very impressed with your newletter, this is the first copy I've seen. I wish I had the $18.00 to subscribe (Don't worry about that, Pete. Ed.). One other minor detail in your review, you make it sound like the $5.00 version is available now, but it isn't. I get more information every day and it will be SOME TIME before it's all finished.

Thanks for your enthusiastic endorsement,
Adios,
Phoenix Pete Fischer
P.O.Box 2002
Tempe, AZ 85281

## Dear Pete

I agree that my review is too glowing. It's partly an attempt to motivate CATS members to take a look at it - I'd like to see a lot more MODEM action in the club. My talk of 40% more information referred to the planned downloads of HELP screens, plus the larger format. I hope that you don't have to type that all in! As to number of members, well, we've had steady attendance of over 40 for the past year, as well as over 100 paid up members. Now, if some of you would just WRITE!

You have been put on our exchange newsletter list. We exchange newsletters with about 30 user's groups, and the mailing list is maintained to reflect those groups that have sent us materials within the last past six months.

MF

750 North Yaleton Avenue
West Covina, CA 91790
January 12, 1987

C.A.T.S.
Capitol Area Timex Sinclair
Users' Group
P. O. BOX 725
Bladensburg, MD 20710

Dear Tom, Mark, et al,

I see my sticker says my subscription is up with the January issue. Did you know that you are probably the only newsletter in the country that has a current month as it's date....my October QZX came in December. But you guys spoiled your victory...you blew it when you labeled it all including your next meeting as January 1988... it is 1987 you know!!!

This letter is more Quill practice. I love the display of Quill, but keeping the screen pretty slows it up a lot. The QL kits are great but while you have them apart be sure to put in the Nachbar fixes from the Quantum Levels, which Tom will know about. I ordered the supposed set of Version 2.3 software as in Doug's prospectus but got version 2.1 which I already had...so a letter went off to A+. I was also expecting the binder with the software as I have nothing that will fit the four hole spacing.

Enclosed is my check for $18 for 1987 ? ? ? ? !

Keep up the good work! I typed in Mark's Circuit Quest but seem to have an invisible man. I guess it uses a joy stick from the STICK entries in the program but I don't see anything on the screen except the maze and the half circles that were named as they appeared. I haven't tried to debug it yet as I just finished it before writing this letter and only ran it once and saved it to disk. My 3.5 inch disks with the Oliger load in 1 second and save in 4, which is about 1/4 the time of the 5.25 or 3 inch disks. The new version 2.0 I/O disk driver of John's gives the best features of both the Oliger and Aerco systems.

By the way our West Coast QZX net is on Sat. morning 10 AM local Pacific time on 7235 KHZ....40 meter band SSB. We had a San Diego member call in and tell us Ray Kingsley (Hot Z etc.) is now in San Diego and will be speaking to the local TSUG down there. One of our guys, Bob WA6OJJ in Apple Valley has his TS-1000 on packet and got through to Alex the QZX publisher in New Mexico. Bob is going to have the whole thing in a brief case portable so he can take in on the airplane. (He is a pilot for an aerospace firm). He is using the ComLINK for the terminal and RS-232 add on to the TS-1000 and the NPJ packet TSC.

Sincerly,

Bob

Bob Howard, WA6DLI

N.B.

## Dear Bob

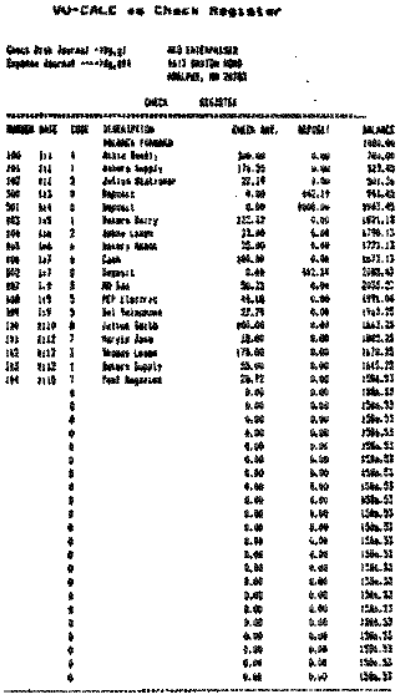
I asked my proofreader about the date question, and she told me she just pasts up what she's given. Hmmm... Sorry to hear of the (hopefully) minor problem with A+. Other reports from members mark them as unusually responsive. As to the four-hole paper, I just re-punched it with US standard holes - it dosen't stick up too much in the binder if the bottom of the paper is set at the US standard point.

Wishing you a productive 1987, MF

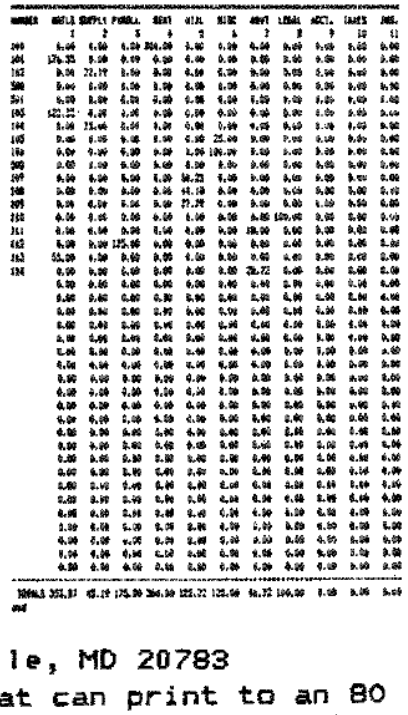
# Check Register on VU-CALC

```
Location: Instruction          Location: Instruction
a1: #f,a,1                     i15: #f,15,$,r
a6: "AKO ENTERPRISES           i15: (i3=1)*i8
b6: "1613 DAYTON ROAD          j15: #r,i15,j15:av15
c6: "ADELPHI, MD 20783         f15: "1
e5: "CHECK                     i16: #f,16,$,r
e7: "REGISTER                  i16: (i3=2)*i8
e10: "JAN. (or current month)  j16: #r,i16,j16:av16
e12: "1986 (or current year)   f16: "2
f1: "-------                   i17: #f,17,$,r
f2: #r,f1,f2:f12               i17: (i3=3)*i8
g1: "NUMBER (data as text)     j17: #r,i17,j17:av17
g2: "DATE   (data as text)     f17: "3
g3: "CODE (Acc.Code depo=0)    i18: #f,18,$,r
g4: "DESCRIPTION ("name)       i18: (i3=4)*i8
h4: "BALANCE FORWARD           j18: #r,i18,j18:av18
g8: "CHECK AMT.                f18: "4
g10: "DEPOSIT                  i19: #f,19,$,r
g12: "BALANCE                  i19: (i3=5)*i8
i3: #f,3,1,1                   j19: #r,i19,j19:av19
i3: 0 (zero for deposit)       f19: "5
j3: #r,i3,j3:av3               i20: #f,20,$,r
i8: #f,8,$,r                   i20: (i3=6)*i8
i8: 0                          j20: #r,i20,j20:av20
j8: #r,i8,j8:av8               f20: "6
i10: #f,10,$,r                 i21: #f,21,$,r
i10: 0                         i21: (i3=7)*i8
j10: #r,i10,j10:av10           j21: #r,i21,j21:av21
h12: #f,12,$,r                 f21: "7
h12: 0                         i22: #f,22,$,r
i12: h12+i10-i8                i22: (i3=8)*i8
j12: #r,i12,j12:av12           j22: #r,i22,j22:av22
aw1: "-------                  f22: "8
aw2: #r,aw1,aw2:aw12           i23: #f,23,$,r
ax6: "TOTALS                   i23: (i3=9)*i8
ax8: %i8:av8                   j23: #r,i23,j23:av23
ax10: %i10:av10                f23: "9
f14: #t,1,14                   i24: #f,24,$,r
f15: #r,f14,f15:f25            i24: (i3=10)*i8
e17: "EXPENSE                  j24: #r,i24,j24:av24
e19: "REGISTER                 f24: "10
g15: "MATLS                    i25: #f,25,$,r
g16: "SUPPLY                   i25: (i3=11)*i8
g17: "PYROLL                   j25: #r,i25,j25:av25
g18: "RENT                     f25: "11
g19: "UTIL                     aw16: #r,aw15,aw16:aw25
g20: "MISC                     ax14: "TOTALS
g21: "ADVT                     ax15: %i15:av15
g22: "LEGAL                    ax16: #r,ax15,ax16:ax25
g23: "ACCT.                    a1: "Check Dist. Journal ->#g,g1
g24: "TAXES                    b1: "Expense Journal ----->#g,e14
g25: "INS                      d1: "Save,#s :Load,#l :Print,#q
```

VU-CALC as Check Register



VU-CALC as Expense Register



Akinbola Olowofoyeku: 1613 Dayton Rd. Hyattsville, MD 20783

NOTE: You'll need a VU-CALC 2068 program that can print to an 80 column printer. Load the program. Then load Check Disbursement-Expense Journals, saved as "c/etemp". Enter daily/weekly/monthly transactions. As some people have problems entering programs and getting them to run, I've decided to make tapes available at $6 postpaid. Make check / money order payable to the above address.

# CIRCLE GAMES

by Mel Richardson

One of the delights of the Oliger Video Upgrade for the T/S 1000 is being able to run programs intended for machines beyond normal ZX capabilities. Peter McMullin has shown this with his recent article using the Modulo function and a "Computer Recreations" column by A.K. Dewdney in the September Scientific American prints the outline of a similar program by John E. Connett creating "Wallpaper For the Mind". Connett found that using the formula for the graph of a circle (X²+Y²) to assign a colour to the point X,Y. A complex pattern of circles emerges with an underlying pattern of squares. Thus the program is called "CIRCLE²".

The patterns appear to repeat, but a closer look shows this is not so and each area is subtly different from its neighbors. Although the program is quite simple, I recommend reading the article. It has two more routines and wonderful photos with more background than be covered here.

This program is written for the Oliger system with Fred Nachbaur's "Jobasic" but a normal ZX using "Graphica" or the 2068 should handle it. The lines up to 10 are Jobasic initiallization and should be changed for your system. The "IF USR M2 THEN..." is also Jobasic syntax.

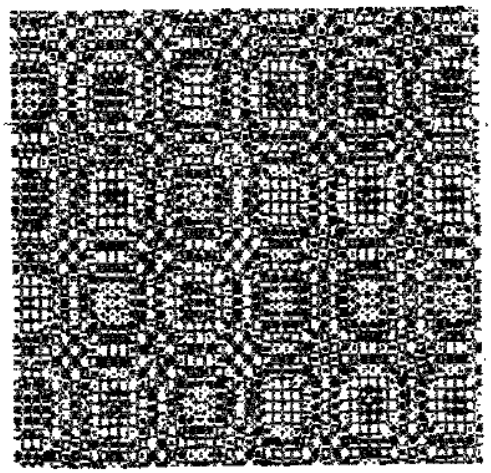
The variables CORNA, CORNB & SIDE define the lower left corner and side length of the part of the plane of numbers to be examined. In other words, a smaller SIDE "magnifies" the image.

Lines 30-90 evaluate X²+Y² through the loops and places the resulting integer in "C". Line 100 tests C for "eveness" and line 110 plots the point if C is even. It might be interesting to assign colours to ranges of C. You are encouraged to experiment with the variables and the array size in lines 30 and 40. The figures in line 110 centre the display and should be changed to suit the array size.

Some examples to try are:
CORNA -15, CORNB -20, SIDE 87
CORNA -30, CORNB 5, SIDE 40
CORNA 20, CORNB -10, SIDE 20.

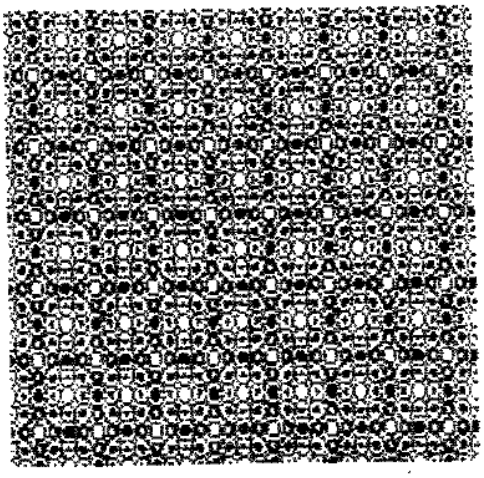
Sinc-Link Nov '86

CORNA? -15 CORNB? -20 SIDE? 87



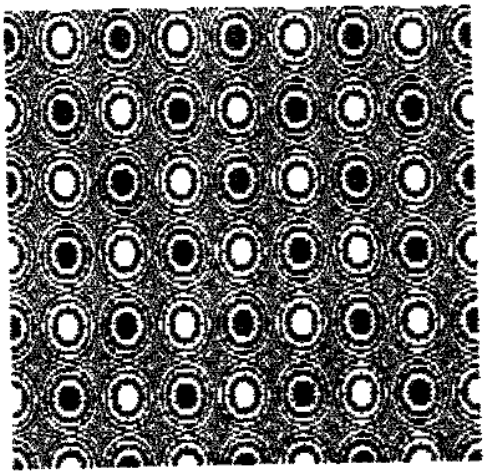
Z-COPY R-RESTART

CORNA? -30 CORNB? 5 SIDE? 40



Z-COPY R-RESTART

CORNA? 20 CORNB? -10 SIDE? 20



Z-COPY R-RESTART

```
   1 REM CIRCLE SQUARED
   2 REM by Mel Richardson,
         Sinc-Link  Dec'86
   3 REM
   4 REM lines 9,50,60,140 are f
or the 2068, or hi-res 1000
   5 REM lines 51,61,141 are for
 the stock 1000
   8 REM
   9 PAPER 0: BORDER 0: INK 7: C
LS
  10 PRINT "cornA = ";
  12 INPUT cornA
  14 PRINT cornA;": ";
  20 PRINT "cornB = ";
  22 INPUT cornB
  24 PRINT cornB;": ";
  30 PRINT "Side = ";
  32 INPUT side
  34 PRINT side
  40 REM  170 x 120 pixel displa
y for 2068, 64 X 42 for 1000
  50 REM   FOR x=1 TO 170
  51  FOR x=0 TO 64
  60 REM    FOR y=1 TO 120
  61   FOR y=0 TO 41
  70     LET i=cornA+(side*x/100)
  80     LET j=cornB+(side*y/100)
  90     LET k=i*i+j*j
 100     LET c=INT k
 110     REM
 120     REM test for evenness
 130     LET e=c/2-INT (c/2)
 140 REM       IF NOT e THEN  PLO
T x+40,y+36
 141      IF NOT e THEN  PLOT x,y
 150    NEXT y
 160   NEXT x
 170 PRINT AT 23,0;"Z-copy R-res
tart"
 180 IF INKEY$="" THEN  GO TO 18
0
 190 IF INKEY$="z" OR INKEY$="Z"
 THEN  COPY
 200 IF INKEY$="r" OR INKEY$="R"
 THEN  RUN
 210 GO TO 180
```

The above listing has been re-written from Mel Richardson's original. All references to Jobasic have been removed, and alternate lines for the 1000 and 2068 have been added. The 1000 version has not been tested, so there may be some de-bugging needed.
MF

## Cleanup/Backup para el QL

by Mark Fisher

As you begin to amass files and programs on the QL's little matchbook-sized cartridges, you will run into the problem of generating backups of your files. Our trusty manual tells us to "simply" type "COPY mdv1_file_name TO mdv2_file_n_bak" or some such. Not impossible, but if you're trying to copy more than one file it can add up to an awful lot of typing.

CLONE represents another way of generating backups - but it requires a DATA statement containing the names of the files to be copied: another quantity of typing.

CLEANUP/BACKUP offers a third alternative. Like CLONE, it allows the user to duplicate an entire source cartridge (on mdv2_), but, in addition it allows you to select the files to be copied. In this way, you can both eliminate those earlier versions of the program you've been working on, and re-arrange the order of programs in the cartridge for easier reference.

For instance, you could re-arrange your files in alphabetical order (with BOOT first, of course); or sort your ARCHIVE data files so as to group all the screen files, then all the program files, then all the data files in sequence for a given application.

To use the program, LOAD it, place the desired source cartridge in mdv2_, and RUN. You will be prompted to make sure there is a destination cart. in mdv1_. Upon confirming that, you will be shown a list of the contents of both drives, as well as a menu of your options. They are generally self-explanatory, but I should stress that the (D)elete option deletes the file from mdv2_, not mdv1_.

The Works:

CLEANUP/BACKUP is divided into three parts. Parts one and two are fully automatic. Part one (lines 100 - 270) temporarily sets up a data file on mdv2_ to hold the directory as it is read from the header. Part two (lines 280 - 340) then transfers this file to an array, and deletes the microdrive file. Part three, "select_fil," presents you with the contents of mdv1_ and mdv2_, and allows you to choose your next course of action. Line 1020 allows you to easily update the copy of the program on your microdrive, if you improve the program.

As it is set up now, it will handle cartridges with up to 14 files. The limitation stems from the size of the display. It would be possible to use the WINDOW and SCROLLing facilities of SUPERbasic to remove this limitation, but I'm not up to that yet. Anyone that is interested in the project should feel free to write it up.

```
100 REMark *****  cleanup/ backup utility *****
110 WINDOW 500,235,0,0: INK 7: PAPER 0
120 REMark Create file to hold DIR
130 OPEN_NEW#4,mdv2_direc
140  DIR #4, mdv2_
150  PRINT #4, CHR$(26)
160 CLOSE #4
170 PRINT 'Loading Array with file names'
180  OPEN_IN #4,mdv2_direc : CLS
190  LET count=0
200  REPeat rd
210   count=count+1
220   INPUT #4, a$
230   IF EOF (#4): EXIT rd
240  END REPeat rd
250 count=count-3
260 PAUSE 200
270 CLOSE #4
280 DIM dir$(count,30)
290 OPEN_IN #4,mdv2_direc : CLS
300  FOR i=0 TO count
310   INPUT #4, dir$(i)
320  END FOR i
330 CLOSE #4
340 DELETE mdv2_direc
350 select_fil
360 STOP
370 DEFine PROCedure prdir
380  FOR i=0 TO count
390   PRINT TO 40;dir$(i)
400  END FOR i
410 END DEFine
420 DEFine PROCedure select_fil
430  CLS
440  PRINT 'Cartridge in MDV1_? Press space to continue - (Q)
to Quit ': r$=INKEY$(-1)
450  CLS : IF r$()' ' THEN EXIT select_fil
460  PRINT 'MDV1 now contains:'; TO 40;'MDV2 now contains:'\\
470  prdir : num=2 : AT 2,0: DIR mdv1_
480  AT 20,0
490  PRINT 'Press : (C)opy all files -- MDV1 WILL BE ERASED
ENTER) to copy selected file'
500  PRINT '        (D)elete selected program
F)ormat MDV1'
510  PRINT '        (^ or v) Select files
Q)uit'
550  REPeat updn
560   AT num+2,35: PRINT'---)'
570   key = CODE (INKEY$(-1))
580   AT num+2,35: PRINT'    '
590   num=num+(key=216)-(key=208)
600   IF num>count THEN num=count
610   IF num<2 THEN num=2
620   IF key=10 THEN cpy:AT 2,0: DIR mdv1_
630   IF key=CODE('c') THEN cpyall
640   IF key=CODE('d') THEN del
650   IF key=CODE('f') THEN fmt
660   IF key=CODE('q') OR key=CODE('Q') THEN EXIT updn
670  END REPeat updn
680 END DEFine
690 DEFine PROCedure fmt
700  a$=dir$(0, 1 TO ' ' INSTR(dir$(0))-1) : PAUSE 50 : a$=a$(
1 TO 6)&'_bak'
710  AT 19,0: PRINT 'Press ENTER to format as'!a$!', Q to quit
, or type new vol. name:'; : INPUT !q$;
720  CLS 3
730  IF q$='q' OR q$='Q' THEN RETurn
740  IF q$()'' THEN a$=q$
750  AT 19,0: FORMAT "mdv1_"&a$ ;: CLS 3
760  AT 2,0: DIR mdv1_: PRINT '      '
770 END DEFine
780 DEFine PROCedure cpy
790  a$=dir$(num)
800  IF a$='000000' THEN RETurn
810  COPY "mdv2_"&a$ TO "mdv1_"&a$
820 END DEFine
830 DEFine PROCedure cpyall
840  fmt
850  FOR num=2 TO count
860   cpy
870  END FOR num
880  AT 2,0
890  DIR mdv1_
900  PRINT '      '
910 END DEFine
920 DEFine PROCedure del
930   a$=dir$(num)
940  IF a$='000000' THEN RETurn
950  AT 19,0: PRINT 'DELETING ';a$;'. Press SPACE to continue,
 (Q) to abort:';:q$=INKEY$(-1)
960  CLS 3: IF q$='q'THEN RETurn
970  AT num+2,40: OVER 1 : PRINT '-------------------------':
OVER 0
980  DELETE 'mdv2_'&a$
990  dir$(num)='000000'
1000 END DEFine
1010 STOP
1020 DELETE mdv2_cleanup: SAVE mdv2_cleanup
```

## Get it RIGHT!!

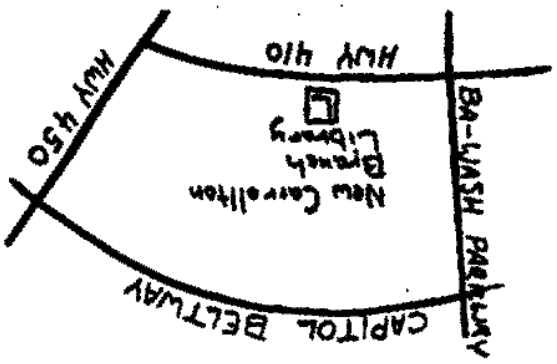
**Does CATS have current membership information about you?**

**If there is enough interest, Treasurer Ruth Fegley can bring her Sinclair/Aerco configuration to the next meeting, along with her membership diskette.**

**Then, if you drop by to see her, your information can be put on her monitor for you to verify.**

**So make it a point to see Ruth at the next meeting, stop and say hello, and bring your records up to date all in one trip!!**

CATS Newsletter
P.O. Box 725
Bladensburg MD 20710




COME TO OUR MEETING!
The next meeting of C.A.T.S. will be held on:

Saturday, February 14, 1987: 12:00 PM Hardware meeting
2:00 PM General meeting

At: New Carrollton Public Library
7414 Riverdale Road (Hwy 410), New Carrollton, MD

IF YOU ARE NOT A MEMBER OF CATS, THIS IS THE ONLY ISSUE YOU WILL RECIEVE
Dues = $18.00 per year, per family.

FIRST CLASS

## The Capitol Area Timex/Sinclair User's Group

is a non-profit group devoted to serving the interests of those who own, use, or are interested in the Timex/Sinclair family of computers.

### Officialdom

| | |
|---|---|
| President & contact person | Tom Bent (301) 730-7187 |
| Vice-President | Hank Dickson |
| Treasurer | Ruth Fegley |
| Editor | Mark Fisher |
| N/L Production | Sarah Fisher |
| Mailing & Finishing | Bob Curnutt |

Monthly meetings are held from 12:00 to 5:00, on the second Saturday of each month, at the New Carrolton Branch Public Library.

### Membership Info:

Memberships cost $18.00 per year, and are good for 12 months. 95% of dues goes to printing and first class mailing costs.

Submissions of pertinent articles are gratefully accepted - preferably in 3 5/8" columns. The deadlines are.....

| Newsletter | Meeting |
|---|---|
| | February 14 |
| February 23 | March 14 |
| March 23 | April 11 |

### Newsletter exchange:

CATS maintains a gratis exchange of newsletters with approximately 30 User's groups across the country. Clubs not sending a n/l to us for six months are automatically dropped from the list.

### Network Info:

Timex SIG on Compuserve: Wednesday night, 10PM Eastern time (GO CLUB)
GZX BBS:(505) 522-7081 FIDO net 15, node 6
---*--- East Coast: (703) 547-4815 FIDO net 18, node 9